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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/642,103	08/21/2000	Clemens Luchner	951/48969	8675

7590

06/18/2002

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EXAMINER

TAMAI, KARL I

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 06/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/642,103

Applicant(s)

LUCHNER ET AL.

Examiner

Tamai IE Karl

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 14-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-13, drawn to an electric machine, classified in class 310, subclass 217.
 - II. Claims 14-19, drawn to a method of making a machine, classified in class 29, subclass 598.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions Group I and Group II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the machine can be made by alternative process (e.g. machining, forging, or assembly of parts) instead of the electromagnetic forming.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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4. Because these inventions are distinct for the reasons given above and the method of making search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Donald Evenson on April 1, 2002 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-13. Affirmation of this election must be made by applicant in replying to this Office action. Claims 14-19 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Drawings

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the stator and carrier with all the claimed limitations, additional indentation of profiled contact surface, the starter and generator device, the crankshaft, and the internal combustion engine must be shown or the features canceled from the claims. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

7. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

8. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

9. Claims 1-13 are objected to because of the following informalities: Claim 13, line 7, there is an open bracket "(" which is not followed by a corresponding closed bracket ")". Appropriate correction is required.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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11. Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The specification does not contain a full, clear, concise, and exact written description of the stator laminations being held by form locking contact.

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-13 are vague and indefinite because it is unclear whether the Applicant is claiming an apparatus or a method of making an apparatus. The preamble indicates the invention is an electrical rotating machine apparatus, but the claim limitations "caused by plastic deformation" and "form locking contact is achieved....by electromagnetic forming" in claim 1 are method of making limitations. Additionally, claim 3 recites "jacket is molded by electromagnetic forming", claim 4 recites "shrinkage occurring with the cooling of the cast hub", claims 5-8 recite "is molded into the indentation during electromagnetic forming In order to advance prosecution on the merits, the examiner has considered these claims as "product by process claims". As a product by a process claim "even though the product-by process claims are limited by and defined by the process, determination of patent ability is based

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on the product itself. The patent ability of the product does not depend on its method of production. If the product in the product by process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process". *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966(Fed. Cir. 1985).

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1-4 and 9-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Swartz (US 3,477,125).

Swartz teaches a motor(rotor and stator) having a non-rotatable connection between the profiled contact surface of the rotor 34 and the form locking contact of the carrier 16. Swartz teaches the rotor hub/carrier 16 having a thin walled cylinder jacket 15. Swartz teaches all the structure claimed by the Applicant, but does not teach electromagnetic formation of the carrying element, form locking contacts on the carrying element formed by plastic deformation, or casting of the rotor hub. Because the structure of Swartz is identical to the applicant's claimed structure, the product by process claim is anticipated by Swartz under 35 USC 102, or is an obvious modification of Swartz under 35 USC

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103 as an obvious method of manufacturing the known structure. In regards to claims 9-13, the limitations are merely intended use and do positively recite any additional structural language.

16. Claims 1-4 and 9-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Spreen (US 1,688,891).

Spreen teaches a motor (rotor and stator) having a non-rotatable connection between the profiled contact surface of the stator 18 and the form locking contact of the carrier 16. Spreen teaches the stator/carrier 16 having a thin walled cylinder jacket 17.

Spreen teaches the stator having an assignment between the wave crests and the stator winding slots. Spreen teaches all the structure claimed by the Applicant, but does not teach electromagnetic formation of the carrying element, form locking contacts on the carrying element formed by plastic deformation, or casting of the rotor rub.

Because the structure of Spreen is identical to the applicant's claimed structure, the product by process claim is anticipated by Spreen under 35 USC 102, or is an obvious modification of Spreen under 35 USC 103 as an obvious method of manufacturing the known structure. In regards to claims 9-13, the limitations are merely intended use and do positively recite any additional structural language.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swartz (US 3,477,125) and Day et al. (Day)(US 5,306,123). Swartz teaches every aspect of the invention except the additional indentation on the rotor laminations to axially secure the rotor. Day teaches axial indentations 27 in the laminations to prevent axial movement of the rotor. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the rotor of Swartz with the axial indentations of Day to prevent axial movement of the rotor.

19. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swartz (US 3,477,125) and West (US 4,471,252). Swartz teaches every aspect of the invention except the intended use in a starter/generator with an internal combustion machine. West teaches a laminated core for use in a synchronous starter/generator used with an internal combustion engine. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the rotor of Swartz in the starter/generator of West to assure the laminated rotor core is secured to the shaft when rotated by the internal combustion engine.

20. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spreen (US 1,688,891) and Day et al. (Day)(US 5,306,123). Spreen teaches every aspect of the invention except the additional indentation on the laminations to axially secure the core to the carrier. Day teaches axial indentations 27 in the laminations to prevent axial movement of the core on the carrier. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the rotor of Spreen with the axial indentations of Day to prevent axial movement of the rotor.

21. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spreen (US 3,477,125) and West (US 4,471,252). Spreen teaches every aspect of the invention except the intended use in a starter/generator with an internal combustion machine. West teaches a laminated core for use in a synchronous starter/generator used with an internal combustion engine. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the rotor of Spreen in the starter/generator of West to assure the laminated rotor core is secured to the shaft when rotated by the internal combustion engine.

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22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (703) 305-7066.

The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nestor Ramirez, can be reached at (703) 308-1371. The facsimile number for the Group is (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Karl I Tamai
PRIMARY PATENT EXAMINER
June 17, 2002



KARL TAMAI
PRIMARY EXAMINER